

Appl. No. 10/629,086
Amdt. dated Jan. 31, 2005
Reply to Office action of Nov. 2, 2004

Amendments to the Claims:

This listing of claims will replace all prior versions, and listing, of claims in the application.

Listing of Claims:

1. (Currently Amended) A backlight assembly for a display device, the display device including an image display part on which an image is displayed, the backlight assembly comprising:

- a light source that generates a first light;
- a light-distribution changing member that changes an optical distribution of the first light exiting from the light source; and
- an electromagnetic-wave shielding member that shields an electromagnetic wave generated from an electric power applied to the light source from the image display part, the electromagnetic-wave shielding member including shielding lines.

2. (Original) The backlight assembly of claim 1, wherein the light-distribution changing member includes a diffuser and a plurality of optical sheet, the diffuser diffusing the first light exiting from the light source, and the optical sheets being disposed over the diffuser and enhancing a luminance of a second light exiting from the diffuser.

3. (Original) The backlight assembly of claim 2, wherein the electromagnetic-wave shielding member comprises a conductive material, and the electromagnetic-wave shielding member is formed on a surface of the diffuser and has a mesh shape.

4. (Original) The backlight assembly of claim 3, wherein the electromagnetic-wave shielding member includes a plurality of first shielding lines and a plurality of second shielding lines, the first shielding lines being formed along a first direction, and the second shielding lines being formed along a second direction crossing the first shielding line.

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5. (Original) The backlight assembly of claim 4, wherein the first shielding lines are formed in parallel with each other, each of the first shielding lines has a first width, adjacent two first shielding lines are spaced apart from each other by a first distance, and a first ratio of the first width to the first distance is from about 1:7 to about 1:20.

6. (Original) The backlight assembly of claim 5, wherein the second shielding lines are formed in parallel with each other, each of the second shielding lines has a second width, adjacent two second shielding lines are spaced apart from each other by a second distance, and a second ratio of the second width to the second distance is from about 1:7 to about 1:20.

7. (Original) The backlight assembly of claim 4, wherein each of the first shielding lines is perpendicular to each of the second shielding lines.

8. (Original) The backlight assembly of claim 3, further comprising a protection film that protects the electromagnetic-wave shielding member.

9. (Original) The backlight assembly of claim 8, wherein the protection film comprises transparent organic material.

10. (Original) The backlight assembly of claim 3, wherein the conductive material is one selected from the group consisting of copper (Cu), chromium (Cr), molybdenum tungsten (MoW), chromium oxide (CrO_x), indium tin oxide (ITO) and indium zinc oxide (IZO).

11. (Original) The backlight assembly of claim 2, wherein the electromagnetic-wave shielding member comprises conductive material, and the electromagnetic-wave shielding member is inserted into a groove formed on a surface of the diffuser.

12. (Original) The backlight assembly of claim 2, wherein the light-distribution changing member further includes a complementary diffuser, disposed between the diffuser and the optical sheets, for diffusing the second light diffused by the diffuser.

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13. (Original) The backlight assembly of claim 12, wherein the electromagnetic-wave shielding member comprises a conductive material, and the electromagnetic-wave shielding member is formed on a surface of the complementary diffuser.

14. (Original) The backlight assembly of claim 1, further comprising a receiving container that receives the light source, the light-distribution changing member and the electromagnetic-wave shielding member.

15. (Currently Amended) A liquid crystal display device comprising:
a display panel that receives an image signal to display an image corresponding to the image signal, the display panel including a first substrate, a second substrate combined with the first substrate, and a liquid crystal layer interposed between the first and second substrates;
a backlight assembly including a light source that generates a first light and a light-distribution changing member that changes an optical distribution of the first light exiting from the light source, and the backlight assembly providing the display panel with the first light; and
an electromagnetic-wave shielding member that shields an electromagnetic wave generated from an electric power applied to the light source, thereby preventing the electromagnetic wave from affecting electromagnetically the image display part, the electromagnetic-wave shielding member including shielding lines.

16. (Original) The liquid crystal display device of claim 15, wherein the light-distribution changing member includes a diffuser and a plurality of optical sheet, the diffuser diffusing the first light exiting from the light source, and the optical sheets being disposed over the diffuser and enhancing a luminance of a second light exiting from the diffuser.

17. (Original) The liquid crystal display device of claim 16, wherein the electromagnetic-wave shielding member comprises a conductive material, and the electromagnetic-wave shielding member is formed on a surface of the diffuser and has a mesh shape.

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18. (Original) The liquid crystal display device of claim 17, wherein the electromagnetic-wave shielding member includes a plurality of first shielding lines and a plurality of second shielding lines, the first shielding lines being formed along a first direction, and the second shielding lines being formed along a second direction crossing the first shielding line.

19. (Original) The liquid crystal display device of claim 18, wherein each of the first shielding lines has a first width, adjacent two first shielding lines are spaced apart from each other by a first distance, and a first ratio of the first width to the first distance is from about 1:7 to about 1:20.

20. (Original) The liquid crystal display device of claim 19, wherein each of the second shielding lines has a second width, adjacent two second shielding lines are spaced apart from each other by a second distance, and a second ratio of the second width to the second distance is from about 1:7 to about 1:20.

21. (Original) The liquid crystal display device of claim 18, wherein each of the first shielding lines is perpendicular to each of the second shielding lines.

22. (Original) The liquid crystal display device of claim 17, wherein the conductive material is one selected from the group consisting of copper (Cu), chromium (Cr), molybdenum tungsten (MoW), chromium oxide (CrO_x), indium tin oxide (ITO) and indium zinc oxide (IZO).

23. (Original) The liquid crystal display device of claim 16, wherein the electromagnetic-wave shielding member comprises conductive material, and the electromagnetic-wave shielding member is inserted into a groove formed on a surface of the diffuser.

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24. (Original) The liquid crystal display device of claim 16, wherein the light-distribution changing member further includes a complementary diffuser, disposed between the diffuser and the optical sheets, thereby diffusing the second light diffused by the diffuser.

25. (Original) The liquid crystal display device of claim 24, wherein the electromagnetic-wave shielding member comprises conductive material, and the electromagnetic-wave shielding member is formed on a surface of the complementary diffuser.

26. (Original) The liquid crystal display device of claim 15, further comprising a receiving container that receives the display panel and the backlight assembly, wherein the backlight assembly has a plurality of conductive sidewall, and the electromagnetic-wave shielding member electrically contacts with at least one of the conductive sidewalls to be connected an earth potential.

27. (Original) The liquid crystal display device of claim 26, further comprising a connection member that electrically connects the electromagnetic-wave shielding member with the receiving container, the connection member comprising a conductive material.

28. (Original) The liquid crystal display device of claim 27, further comprising a fixing member that fixes the connection member to the receiving container, the fixing member comprising conductive material.

29. (New) A backlight assembly for a display device, the display device including an image display part on which an image is displayed, the backlight assembly comprising:
a light source that generates a first light;
a light-distribution changing member that changes an optical distribution of the first light exiting from the light source; and
an electromagnetic-wave shielding member that shields an electromagnetic wave generated from an electric power applied to the light source from the image display part, the electromagnetic-wave shielding member being patterned.

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30. (New) The backlight assembly of claim 29, wherein the light-distribution changing member comprises a diffuser, and the electromagnetic-wave shielding member is patterned on the diffuser.